

EXHIBIT B

**EXHIBIT REDACTED
IN ITS ENTIRETY**

EXHIBIT C

**EXHIBIT REDACTED
IN ITS ENTIRETY**

EXHIBIT D

MARVIN STODOLSKY, Ph.D.

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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

AFFYMETRIX, INC.,)	
)	
Plaintiff,)	
)	
v.)	
)	CASE NO. 04-901 JJF
ILLUMINA, INC.,)	
)	
Defendant)	
)	

VIDEOTAPED DEPOSITION OF MARVIN STODOLSKY, Ph.D.

Washington, D.C.

Friday, January 27, 2006

9:37 a.m.

Job No. 22-71849

Pages 1 - 173

Reported by: Carl W. Girard, Notary Public

Videographer: Cali Day

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09:39:07 1 Q. Is that Germantown, Maryland?

09:39:09 2 A. Yes.

09:39:09 3 Q. What's your work address?

09:39:12 4 A. 19901 Germantown Road, Germantown,
09:39:18 5 Maryland, 20874-1129 at the Department of Energy
09:39:24 6 Campus in Germantown.

09:39:25 7 Q. You currently work with the Department
09:39:27 8 of Energy?

09:39:28 9 A. Yes.

09:39:28 10 Q. What's your current position with the
09:39:30 11 Department of Energy?

09:39:31 12 A. I'm a molecular biologist.

09:39:34 13 Q. How long have you worked for the
09:39:38 14 Department of Energy?

09:39:39 15 A. I became formally a DOE employee in
09:39:41 16 1992; however, in the period 1986 to 1992 I was
09:39:47 17 essentially doing the same job as a detailee for
09:39:51 18 the Argonne National Laboratory.

09:39:55 19 Q. I will be asking you a number of
09:39:57 20 questions today, Dr. Stodolsky, largely about some
09:40:03 21 of the discussions, scientific presentations,
09:40:06 22 meetings, and events from the late 1980s and early
09:40:11 23 1990s.

09:40:11 24 Before I go more into that I'd like to
09:40:15 25 continue to ask you a few more questions about your

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09:43:23 1 think you indicated was from 1986 to 1992 when you
09:43:26 2 were a detailee to the Department of Energy?

09:43:29 3 A. Yes.

09:43:30 4 Q. What were your responsibility as
09:43:32 5 detailee to the Department of Energy?

09:43:38 6 A. Fairly diverse. Of the team that was
09:43:43 7 office at the time I was the freshest out of the
09:43:46 8 laboratory and with the most hand-on knowledge of
09:43:48 9 issues concerning cloning resources and the DNA
09:43:54 10 technologies.

09:43:58 11 So I helped to formulate research calls,
09:44:06 12 found reviewers for research panels, managed
09:44:09 13 panels; subsequent to the panels, wrote up the
09:44:14 14 grant paperwork, which often I couldn't sign
09:44:16 15 because I wasn't a federal employee.

09:44:21 16 And site visited projects at the DOE
09:44:31 17 laboratories, helped write up the yearly progress
09:44:38 18 reports on the human genome program -- quite
09:44:42 19 diverse, overlapped a little bit into the
09:44:46 20 instrumentation area with my colleague Jerry
09:44:50 21 Goldstein, now retired, who was the major person
09:44:53 22 managing the instrumentation sector at the time.

09:44:58 23 Q. You mentioned that one of your
09:45:00 24 responsibilities was forming research calls?

09:45:03 25 A. Yes.

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09:45:03 1 Q. What is a research call?

09:45:05 2 A. Well, this is, our matriculation of what
09:45:12 3 is necessary over the next few years in the
09:45:15 4 advancement of the overall program -- it was the
09:45:18 5 human genome program until this case -- so with my
09:45:20 6 colleagues we would decide what should be
09:45:23 7 emphasized in the public and publicly request for
09:45:27 8 applications, which came out in the Federal
09:45:31 9 Register and other advertisement sources.

09:45:35 10 Q. So is this a request published in the
09:45:39 11 Federal Register to --

09:45:40 12 A. Invite applications from anyone, United
09:45:43 13 States and abroad.

09:45:46 14 Q. When you say applications, the
09:45:47 15 applications for funding?

09:45:49 16 A. Correct. We would specify the general
09:45:54 17 area we were interested in, and then scientists,
09:46:01 18 businesses, were invited to submit applications
09:46:06 19 which they thought met the needs we had announced,
09:46:11 20 and then review panels would be formed to review
09:46:16 21 these applications, advising the Department of
09:46:18 22 Energy as to which would be the best ones to fund.

09:46:23 23 Q. Did you have involvement in forming
09:46:25 24 review panels that reviewed projects relating to
09:46:30 25 the human genome project?

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10:04:01 1 A. Well, it was never -- well, let me
10:04:02 2 qualify. It was never 100 percent full time in
10:04:05 3 that sense, in that we all had -- everyone in the
10:04:07 4 office had some overlap in other responsibilities,
10:04:11 5 as needed, by I would say like probably
10:04:15 6 functionally 90 percent of my time was, from about
10:04:21 7 1988 on, was concerned with the human genome
10:04:25 8 project.

10:04:25 9 Q. When did you first have any interaction
10:04:30 10 with either Dr. Drmanac or Dr. Crkvenjakov?

10:04:34 11 A. Right. Okay. When we had our first
10:04:39 12 public call for research under the human genome
10:04:42 13 program they put in an application, and it reviewed
10:04:50 14 well, and we set up the vehicle to -- the vehicles
10:04:58 15 to fund them.

10:05:01 16 The consequence -- the useful vehicle at
10:05:05 17 that time was there was a treaty of technical and
10:05:10 18 scientific cooperation between the United States
10:05:13 19 and Yugoslavia which greatly simplified moving of
10:05:18 20 money over there, and then they came to -- they
10:05:27 21 received the funding and came to our meeting --
10:05:36 22 public meeting in May at Cold Spring Harbor which
10:05:39 23 was focussed on the human genome program. That was
10:05:42 24 an NIH-sponsored meeting. And they came and that's
10:05:45 25 when I first physically met them.

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10:11:32 1 A. Yes.

10:11:32 2 Q. Who is the reference to the Board there?

10:11:35 3 Who was that?

10:11:39 4 A. This was the board managing the treaty.

10:11:45 5 Q. The U.S./Yugoslavia Treaty?

10:11:48 6 A. Yes.

10:11:48 7 Q. There's the reference to one DOE program

10:11:52 8 officer?

10:11:53 9 A. Uh-huh.

10:11:53 10 Q. Do you see that?

10:11:54 11 A. Yes.

10:11:54 12 Q. Was there a DOE program officer that had

10:11:58 13 responsibilities for this grant by Dr. Crkvenjakov

10:12:04 14 or Drmanac?

10:12:04 15 A. The program officer was meant in a

10:12:07 16 generic sense without specifying any one but, this

10:12:12 17 was an enablement that was under the treaty, and,

10:12:19 18 in fact, the office chose me to go because I was

10:12:22 19 the one who was most familiar with these types of

10:12:27 20 technologies.

10:12:28 21 Q. When you say it was an enablement I

10:12:30 22 think under the treaty -- those were your words?

10:12:33 23 A. Right.

10:12:33 24 Q. Do you mean that the treaty permitted

10:12:36 25 someone to go visit their laboratory?

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10:12:38 1 MS. NOREIKA: Objection, leading. Go
10:12:41 2 ahead.
10:12:41 3 BY MR. PALS:
10:12:41 4 Q. Let me say it this way: When you said
10:12:44 5 enablement under the treaty, this was an enablement
10:12:47 6 under the treaty, what did you mean?
10:12:56 7 A. This project was funded under the
10:12:59 8 umbrella of the treaty and written up in certain
10:13:04 9 legalese and they decided to put into it when this
10:13:08 10 particular grant was written up that the funds
10:13:12 11 could be used for one of the Yugoslavia team to
10:13:16 12 come to the U.S., to report to scientific meetings
10:13:19 13 and reciprocally someone from the United States
10:13:22 14 would site visit the lab in Belgrade.
10:13:27 15 Q. You ended up being the DOE program
10:13:30 16 officer who site-visited Dr. Drmanac and
10:13:34 17 Crkvenjakov's lab?
10:13:35 18 A. Close. In fact, I was not a DOE
10:13:38 19 employee at the time but they chose to send me
10:13:40 20 because I had the strongest background in that
10:13:43 21 area.
10:13:44 22 Q. Did you go to Yugoslavia to visit
10:13:49 23 Dr. Crkvenjakov and Drmanac in 1988?
10:13:54 24 A. Yes.
10:13:56 25 Q. What do you recall about that visit?

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10:31:11 1 not know it at the time when I visited them, but in
10:31:15 2 fact this team was being courted by the Argonne --
10:31:19 3 were in discussions with the Argonne National
10:31:22 4 Laboratory.

10:31:22 5 Actually, I did know; they did bring
10:31:25 6 that up explicitly as I recall, although -- that
10:31:30 7 they had been approached by a division director
10:31:38 8 Eliza Huberman to move to the Argonne National
10:31:48 9 Laboratory.

10:31:48 10 And they did ask me questions, the team
10:31:52 11 and members of the host institute on, you know,
10:31:57 12 what life would be like in the United States and
10:31:59 13 what sort of arrangements might be implemented.

10:32:03 14 Q. So there was a 1990 trip report as well?

10:32:06 15 A. Yes.

10:32:07 16 Q. So there's, just so the record is clear,
10:32:09 17 you made trips in 1988, 1989 and 1990 --

10:32:13 18 A. Yes.

10:32:15 19 Q. -- to visit Drs. Crkvenjakov and
10:32:17 20 Drmanac?

10:32:18 21 MS. NOREIKA: Objection, leading.

10:32:19 22 A. Yes.

10:32:20 23 BY MR. PALS:

10:32:20 24 Q. Is that right?

10:32:21 25 A. Yes.

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10:45:22 1 discussion and they were certainly able to vote in
10:45:25 2 the rating of the applications.

10:45:33 3 Q. Could you turn back to Exhibit 254 which
10:45:36 4 is your 1989 trip report?

10:45:37 5 A. (Witness complied.)

10:45:39 6 Q. At the end of the second paragraph you
10:45:42 7 state, "I am technical representative for several
10:45:46 8 of the DNA sequencing technology projects within
10:45:50 9 the Human Genome Initiative."

10:45:53 10 Do you see that?

10:45:55 11 A. I'm sorry. Where is that?

10:45:56 12 Q. The second paragraph.

10:45:59 13 A. Yes.

10:46:01 14 Q. For what DNA sequencing technology
10:46:03 15 projects within the Human Genome Initiative were
10:46:08 16 you the technical representative for?

10:46:11 17 A. Oh, well, by that time I was the rep for
10:46:16 18 the Crkvenjakov and Drmanac proposal. I would have
10:46:23 19 to go back to our program report. I could pick out
10:46:27 20 the others but these are projects like in
10:46:35 21 developing of clones which were to be used for
10:46:36 22 development of vectors, development of enzymes.

10:46:44 23 I was not responsible for the
10:46:49 24 instrumentation development at that time except as
10:46:52 25 it overlaps into one of these projects and which

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10:46:55 1 are responsible for the more biological resources.

10:46:58 2 Q. Did you have responsibilities for any
10:47:01 3 funding to Dr. Foote?

10:47:06 4 A. That was mostly through my colleague
10:47:13 5 Gerald Goldstein. That was more the
10:47:16 6 instrumentation sector, but we had next-to offices
10:47:20 7 and frequently consulted with one another and keep
10:47:24 8 each other abreast of what was going on.

10:47:26 9 Q. So you had some familiarity with the
10:47:28 10 work Dr. Foote was doing?

10:47:29 11 A. Yes.

10:47:30 12 Q. Did you have any responsibilities with
10:47:32 13 respect to funding of Dr. Mirzabekov?

10:47:37 14 A. Yes. I worked through the rather
10:47:42 15 arduous process of that, because, in contrast to
10:47:44 16 the Yugoslavia case, we did not have a treaty with
10:47:48 17 Russia governing the specific thing and having --
10:47:51 18 and we were still at the edges of the Cold War and
10:47:55 19 wanted to make sure we did not step on, touch any
10:48:01 20 sensitive issues in the course of implementing
10:48:05 21 this -- this funding, so it proceeded very
10:48:09 22 cautiously through the Department of Energy.

10:48:14 23 I wrote up several papers that went up
10:48:17 24 the track explaining what was going on and there
10:48:20 25 were no defense secrets involved and it would

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10:49:36 1 involved, and not just for the Yugoslav project but
10:49:40 2 for any of the projects. If I saw opportunities to
10:49:46 3 move the program forward by having Two groups talk
10:49:52 4 to one another, whereas they did not yet know what
10:49:55 5 was going on in each other's lab because they
10:49:59 6 hadn't been published, I would say, you know, send
10:50:02 7 them like an e-mail, or tell them at a meeting, you
10:50:02 8 know, you could benefit from talking to one
10:50:08 9 another. And I did a lot of that facilitation.

10:50:12 10 Q. In the next paragraph on the next page
10:50:15 11 of Exhibit 254, you state, second sentence, "Most
10:50:20 12 outstanding are improvements in DNA interrogation
10:50:24 13 procedures and a scheme for process
10:50:28 14 miniaturization."

10:50:29 15 Do you see that?

10:50:30 16 A. I'm sorry. Which page?

10:50:32 17 Q. In the fourth paragraph?

10:50:34 18 A. Right.

10:50:34 19 Q. What is the scheme proper process
10:50:38 20 miniaturization that you're referring to?

10:50:39 21 A. That was this concept for using small
10:50:45 22 beads as anchors for the reagents.

10:50:48 23 Q. In the next sentence of the fourth
10:50:51 24 paragraph on the first page of Exhibit 254 you
10:50:53 25 refer to the SBH team. Do you see that? First

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10:51:00 1 page, fourth paragraph third sentence.

10:51:03 2 A. Yes.

10:51:03 3 Q. You see "the SBH team are now seeking
10:51:06 4 collaborators?"

10:51:07 5 A. Yes, uh-huh.

10:51:08 6 Q. Who was the SBH team?

10:51:10 7 A. Well, the -- it was slang, acronym the
10:51:14 8 Sequencing by Hybridization team in Belgrade,
10:51:18 9 Crkvenjakov, Drmanac, their students, associates.

10:51:43 10 Q. If you turn to the fifth page of your
10:51:46 11 1989 trip report?

10:51:47 12 A. (Witness complied.)

10:51:51 13 Q. I'm looking at the second paragraph,
10:51:56 14 Dr. Stodolsky.

10:51:57 15 A. Uh-huh.

10:51:58 16 Q. That begins "The capacity to resolve
10:52:02 17 exact sources..." Do you see that?

10:52:08 18 A. (Witness perusing.)

10:52:16 19 Oh, yes. Okay. Uh-huh.

10:52:24 20 Q. You refer in the second paragraph on
10:52:26 21 page 5 of your 1989 trip report to a manuscript,
10:52:30 22 "Prospects for Miniaturized, Simplified and Frugal
10:52:38 23 Human Genome Project" by Drmanac and Crkvenjakov.
10:52:40 24 Do you see that?

10:52:41 25 A. Yes.

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10:52:41 1 Q. That's a manuscript you received from
10:52:49 2 them?
10:52:49 3 A. I saw, at least at that time, I saw the
10:52:51 4 draft. I don't know whether it was -- at least the
10:52:55 5 draft. I don't remember at this point how far
10:52:57 6 along away, along the way it was to the publication
10:53:01 7 track. It was later published.
10:53:03 8 Q. Okay. You did at some point in time see
10:53:08 9 the manuscript for this article by Drs. Drmanac and
10:53:13 10 Crkvenjakov?
10:53:15 11 A. Yes.
10:53:19 12 Q. Can you explain to me what you saw and
10:53:26 13 what you discussed with Drs. Drmanac and
10:53:30 14 Crkvenjakov during your 1989 visit to their
10:53:34 15 laboratory with respect to this concept for
10:53:39 16 miniaturization using what you call in your trip
10:53:43 17 report "discrete particles?"
10:53:44 18 MS. NOREIKA: Objection to form.
10:53:48 19 A. Uh-huh. Okay. Well, this goes back to
10:53:56 20 the wavelength of the reporting signal, again.
10:54:00 21 What they were implementing at that time was the
10:54:03 22 use of blocks which with a reporting signal and an
10:54:09 23 emitted electron during radioactive decaying which
10:54:18 24 limited them to about a millimeter spacing between
10:54:18 25 the individual pixels.

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10:54:18 1 On the other hand, if this -- if this
10:54:23 2 use of flourescent reporters on the speed
10:54:27 3 particles, I call it DP here for short, could be
10:54:33 4 implemented, then they would be limited by the
10:54:36 5 wavelength of the emitting light or the -- or the
10:54:44 6 uniformity with which one would manufacture the
10:54:47 7 speed particles which would have been down to about
10:54:52 8 the 10 micron size at the time.

10:54:56 9 BY MR. PALS:

10:54:57 10 Q. So the idea was to put oligonucleotides
10:55:06 11 on to these discrete particles?

10:55:08 12 A. Yes.

10:55:08 13 MS. NOREIKA: Objection to form.

10:55:13 14 A. Yes. The implementation was to put
10:55:19 15 oligos on to discrete particles which would serve
10:55:27 16 two roles: One would be to sort of serve as a
10:55:31 17 license plate for the particles and the other was
10:55:34 18 to actually bind target DNAs in the interrogation
10:55:40 19 process.

10:55:40 20 BY MR. PALS:

10:55:40 21 Q. How would the -- let me start that over:
10:55:44 22 How could you use an oligo on a discrete particle
10:55:49 23 as a license plate to the particle?

10:55:51 24 MS. NOREIKA: Objection to form.

10:55:52 25 A. An oligo can essentially -- it's one

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10:55:57 1 form of a bar code, so in the same sense that you
10:56:00 2 have bar code readers an oligo can serve as the
10:56:04 3 same role in giving a digital report, essentially
10:56:09 4 license plate?

10:56:10 5 BY MR. PALS:

10:56:10 6 Q. How would that work?

10:56:12 7 MS. NOREIKA: Objection to worm. How
10:56:13 8 did it work? How would it work? Objection
10:56:16 9 to form.

10:56:17 10 MR. PALS: I'm sorry. You interrupted
10:56:18 11 me.

10:56:19 12 Q. When you discussed, during your trip in
10:56:23 13 1989, this concept with Dr. Drmanac and
10:56:27 14 Dr. Crkvenjakov, did they talk with you about using
10:56:30 15 oligos on discrete particles as a license plate?

10:56:34 16 MS. NOREIKA: Objection, to the extent
10:56:35 17 it calls for hearsay.

10:56:41 18 A. They certainly discussed the concept of
10:56:47 19 making beads distinguishable --

10:56:50 20 BY MR. PALS:

10:56:50 21 Q. What did you discuss -- I'm sorry.

10:56:52 22 A. -- by the oligos attached to them.

10:56:54 23 Q. What did you discuss with them about how
10:56:58 24 to make beads distinguishable by the oligos
10:57:01 25 attached to them?

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10:58:37 1 MS. NOREIKA: Objection to form.

10:58:40 2 A. Well, it was -- they told me and I
10:58:42 3 understood it; it's very straightforward. The
10:58:49 4 beads would be localized once they were on the
10:58:55 5 microscope slide and the oligos they carried would
10:59:04 6 serve to distinguishing the origin of the beads in
10:59:10 7 terms of their processing up.

10:59:12 8 So by acquisition of a fluorescent
10:59:20 9 signal one could determine the identity of the
10:59:23 10 beads, one; and, two, by acquisition of a second
10:59:28 11 fluorescent signal carried by the test DNA, assess
10:59:32 12 whether the DNA -- whether the particular bead was
10:59:35 13 binding the test DNA whose interrogation was the
10:59:41 14 overall goal.

10:59:44 15 BY MR. PALS:

10:59:44 16 Q. Did you also discuss with them the use
10:59:49 17 of a characteristic of the bead, for example, size
10:59:51 18 or shape or color, to distinguish one population --
10:59:56 19 I'm sorry, a bead with one probe DNA molecule on it
11:00:02 20 from a bead with a different probe DNA molecule on
11:00:07 21 it?

11:00:07 22 MS. NOREIKA: Objection to form.

11:00:08 23 A. It was essential to the implementation
11:00:10 24 to be able to distinguish the beads. It's a simple
11:00:14 25 concept.

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11:35:56 1 particular members of our advisory group.

11:36:00 2 And often after these meetings we would
11:36:03 3 sit down, on the basis of surveying of these
11:36:07 4 posters, and decide how to fine tune the program
11:36:10 5 for the next stage.

11:36:13 6 So there was that obligatory part and,
11:36:17 7 of course, the scientists were expected to publish
11:36:21 8 in the public literature and when they came forward
11:36:23 9 for grant renewals they should have a substantive
11:36:28 10 publication record on what they had produced with
11:36:32 11 the public funds.

11:36:46 12 Q. Following the Cold Spring Harbor
11:36:48 13 conference in 1989, are you familiar with a
11:36:58 14 conference called the Wolf Trap Sequencing
11:37:01 15 Conference?

11:37:02 16 A. Yes.

11:37:02 17 Q. Did you attend that conference?

11:37:07 18 A. Yes.

11:37:10 19 Q. Do you recall if Dr. Crkvenjakov and
11:37:12 20 Dr. Drmanac attended that conference?

11:37:13 21 A. Yes.

11:37:14 22 Q. Did they?

11:37:16 23 A. I believe so. I believe so.

11:37:49 24 Q. Dr. Stodolsky, I've marked Exhibit 258,
11:37:54 25 which has Illumina production No. 598036.

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1 (Exhibit 258 marked for identification.)

11:38:03 2 BY MR. PALS:

11:38:03 3 Q. Dr. Stodolsky, do you recognize Exhibit
11:38:07 4 258 as a correspondence from Dr. Crkvenjakov to
11:38:09 5 you?

11:38:10 6 A. Yes, I do.

11:38:12 7 Q. Is this from October 1989?

11:38:15 8 A. Yes.

11:38:20 9 Q. There's a reference to a "Rasha" at the
11:38:25 10 bottom after the bottom block paragraph. Do you
11:38:28 11 see that?

11:38:30 12 A. That's slang for rod -- for
11:38:39 13 Dr. Crkvenjakov, slang for his first name, Rasha.

11:38:44 14 Q. His first name is typed Radomir?

11:38:46 15 A. Radomir but "Rasha" was his -- the folks
11:38:49 16 in his lab called him "Rasha".

11:38:58 17 Q. Okay. Did the DOE provide funding to
11:39:01 18 allow Drs. Drmanac, Crkvenjakov and Mr. Labat to
11:39:07 19 attend the Wolf Trap conference?

11:39:10 20 A. It was not quite so much providing
11:39:13 21 funding as approval of the use of funds previously
11:39:18 22 provided for this usage as opposed for the research
11:39:22 23 expenditures in Belgrade.

11:39:26 24 Q. So that the U.S. government did
11:39:29 25 authorize the use of allocated funds for

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11:39:33 1 Drs. Crkvenjakov, Drmanac and Mr. Labat to come to

11:39:37 2 Wolf Trap and to a Santa Fe meeting?

11:39:41 3 MS. NOREIKA: Objection, leading.

11:39:43 4 A. Yes.

11:39:44 5 BY MR. PALS:

11:39:54 6 Q. Did you have any responsibilities for

11:39:57 7 organizing the Wolf Trap Sequencing Conference?

11:40:02 8 A. No.

11:40:03 9 Q. Did you have any responsibilities for

11:40:05 10 organizing the Santa Fe meeting?

11:40:09 11 A. Yes. I was not -- I was just one of a

11:40:14 12 team who helped in the development of the agenda

11:40:18 13 and typically for these meetings my office would

11:40:23 14 receive the abstracts, and then I would order them

11:40:27 15 in like groups to be published in the meeting

11:40:33 16 pamphlet.

11:40:47 17 But preparing for these meetings was a

11:40:50 18 large group effort of which I was just one person.

11:41:21 19 Q. Illumina deposition Exhibit 259 has

11:41:25 20 Illumina production numbers 597859 through 860.

21 (Exhibit 259 marked for identification.)

11:41:32 22 BY MR. PALS:

11:41:32 23 Q. Dr. Stodolsky, do you recognize Illumina

11:41:35 24 deposition Exhibit 259?

11:41:35 25 A. Yes, I do.

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11:41:36 1 Q. What is it?

11:41:38 2 A. It is the -- I guess one of the lead

11:41:44 3 pages of the agenda for the conference.

11:42:31 4 Q. I have marked as Illumina deposition

11:42:34 5 Exhibit No. 260 a document with Illumina production

11:42:38 6 numbers 597861 through 882.

7 (Exhibit 260 marked for identification.)

11:42:46 8 BY MR. PALS:

11:42:47 9 Q. Setting aside the handwriting, at least

11:42:51 10 on the first page of Exhibit 260, Dr. Stodolsky, do

11:42:55 11 you recognize Exhibit 260?

11:42:57 12 A. Yes. It's the poster abstracts for the

11:43:02 13 Wolf Trap conference.

11:43:03 14 Q. For the Wolf Trap Genome Sequencing

11:43:08 15 Conference?

11:43:08 16 A. Yes, for the Wolf Trap Genome Sequencing

11:43:09 17 Conference.

11:43:09 18 Q. Did you say before the conference?

11:43:12 19 A. No, for.

11:43:13 20 Q. For the conference.

11:43:13 21 A. It is for the conference.

11:43:16 22 Q. When you went to the conference at Wolf

11:43:21 23 Trap in October 1989, did you receive copies of

11:43:24 24 Exhibits 259 and 260 before the conference started?

11:43:33 25 A. Probably 259 -- probably something like

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11:43:37 1 259 was broadly publicly available in order to
11:43:42 2 elicit attendees. I suspect, but I don't have a
11:43:50 3 explicit memory, that the poster abstracts were
11:43:53 4 only made available at the conference. That would
11:43:55 5 have been typical for the time.

11:43:59 6 Q. When you arrived at the conference, the
11:44:02 7 Wolf Trap conference in October 1989, you were
11:44:05 8 handed a booklet of abstracts?

11:44:08 9 A. That would have been typical. I don't
11:44:11 10 have explicit memory.

11:44:12 11 Q. It is typical for each attendee to be
11:44:15 12 handed a booklet of abstracts?

11:44:18 13 A. Yes.

11:44:26 14 Q. You indicated earlier that
11:44:32 15 Dr. Crkvenjakov and Drmanac were at least at the
11:44:35 16 Wolf Trap conference, correct?

11:44:37 17 A. Yes.

11:44:37 18 Q. Did they give any presentations or
11:44:39 19 posters at the conference?

11:44:42 20 A. If they had an abstract, they certainly
11:44:45 21 gave a poster. The abstract just would have been
11:44:49 22 the base material for expansion into a poster.

11:44:52 23 Q. Could you look at -- I'll refer you to
11:44:54 24 the number in the lower right-hand corner, the
11:44:57 25 number that ends 869?

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11:48:33 1 discrete particles (DPs) as vehicles for

11:48:38 2 samples/probes."

11:48:40 3 Do you see that?

11:48:42 4 A. Yes.

11:48:47 5 Q. To your knowledge -- let me ask it this

11:48:51 6 way: Do you recall Drs. Drmanac or Crkvenjakov

11:48:57 7 discussing their proposed use of discrete particles

11:49:03 8 as vehicles for samples or probes prior to their

11:49:08 9 poster presentation at Wolf trap in October 1989?

11:49:11 10 MS. NOREIKA: Objection. Hearsay.

11:49:12 11 BY MR. PALS:

11:49:12 12 Q. And I'm talking about public

11:49:14 13 presentation, not strictly your meeting with them

11:49:17 14 which was prior to this?

11:49:18 15 MS. NOREIKA: Same objection.

11:49:21 16 A. I do not know if they had any public

11:49:25 17 presentation prior to this meeting.

11:49:28 18 BY MR. PALS:

11:49:29 19 Q. This poster presentation is a poster

11:49:32 20 presentation of the concept of using discrete

11:49:35 21 particles that you discuss with them in your trip

11:49:40 22 to their laboratory and discussed in your trip

11:49:44 23 report, Exhibit 254; is that correct?

11:49:48 24 A. That is correct.

11:50:07 25 Q. Do you recall how long the poster

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11:50:08 1 presentations were at the Wolf Trap conference?

11:50:14 2 A. Not explicitly, but the typical format

11:50:17 3 of these poster presentations was that you would

11:50:22 4 have a hall. There would be a table with hors

11:50:27 5 d'oeuvres and people would put things on their

11:50:30 6 paper plates and wander around for the poster

11:50:32 7 sessions which could last for anyone from let's say

11:50:36 8 for a minimum of an hour or they might be up for

11:50:39 9 three hours with various people, from a group,

11:50:42 10 taking turns at the poster. That's just a typical

11:50:46 11 format.

11:50:47 12 Q. Prior to the Wolf Trap conference was

11:50:49 13 there any requirement that people execute any

11:50:52 14 confidentiality agreement?

11:50:54 15 A. Not I know of.

11:50:56 16 Q. Was the Wolf Trap conference a public

11:50:59 17 conference?

11:50:59 18 A. Yes.

11:51:00 19 Q. The information that was disclosed and

11:51:01 20 discussed was intended to be information that could

11:51:04 21 be used by others?

11:51:05 22 A. Most definitely.

11:51:21 23 Q. Do you know if people took any notes

11:51:24 24 during the poster sessions at the Wolf trap

11:51:30 25 conference?

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11:51:30 1 A. Some certainly did to -- typically you
11:51:32 2 would wander around with your book of abstracts and
11:51:36 3 stop and talk to the presenter at the poster or
11:51:43 4 just make some additional notes alongside your
11:51:45 5 abstract. That was typical behavior among the
11:51:51 6 scientists.

11:51:52 7 Q. Note-taking was permitted?

11:51:56 8 A. Oh, yes.

11:51:56 9 Q. And people had their abstract booklets
11:51:57 10 at the time of the poster session?

11:51:58 11 A. Oh, yes, definitely.

11:53:11 12 Q. Dr. Stodolsky, I have marked and handed
11:53:14 13 to you Illumina deposition Exhibit 262 which has
11:53:19 14 Illumina production numbers 597958 through 598013.

15 (Exhibit 262 marked for identification.)

11:53:32 16 BY MR. PALS:

11:53:32 17 Q. Dr. Stodolsky, do you recognize Illumina
11:53:34 18 deposition Exhibit 262?

11:53:35 19 A. Yes. This was the pamphlet prepared in
11:53:39 20 preparation for our 1989 workshop.

11:53:44 21 Q. Did you participate in the preparation
11:53:46 22 of Exhibit 262?

11:53:49 23 A. Yes. I would have received the
11:53:54 24 abstracts and sorted them into like groups for
11:54:03 25 assembly into the final pamphlet of which this is a

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11:54:07 1 part, and with projects of similar type being
11:54:11 2 physically close to one another.

11:54:14 3 Q. So Exhibit 262 is a portion of the
11:54:18 4 collection of abstracts that was distributed at the
11:54:21 5 Santa Fe meeting?

11:54:21 6 A. I think it is likely the whole
11:54:23 7 collection. There seems to be missing from here
11:54:27 8 some of the introductory pages for -- it could be
11:54:31 9 that this is just a workshop session, excuse me,
11:54:35 10 the abstract collection. There was usually in the
11:54:39 11 whole program port there would be several
11:54:42 12 introductory page.

11:54:44 13 Q. There are some introductory pages at the
11:54:46 14 minimum missing from what was --

11:54:47 15 A. It could be or this could just be the
11:54:50 16 abstract handout and later it did all appear in
11:54:55 17 some larger program -- workshop report. This is
11:54:59 18 just the abstract session but it's probably
11:55:03 19 complete so far as the abstracts go.

11:55:05 20 Q. Exhibit 262 is a collection of abstracts
11:55:08 21 that you reviewed and compiled for distribution at
11:55:12 22 the Santa Fe meeting?

11:55:14 23 A. Correct.

11:55:17 24 Q. Were the abstracts in Exhibit 262 made
11:55:24 25 available at the beginning of the Santa Fe meeting

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11:55:27 1 in 1989?

11:55:28 2 A. Yes; typically, people would come and
11:55:30 3 they would register and they would be given one of
11:55:33 4 these clothbacks with the abstracts and other
11:55:36 5 meeting materials and meal tickets and
11:55:40 6 advertisements about the local environment and so
11:55:42 7 forth.

11:55:42 8 Q. That's the way it was done at the Santa
11:55:45 9 Fe meeting?

11:55:47 10 A. Yes.

11:55:59 11 Q. Could you look in Exhibit 262 at the
11:56:04 12 page -- the number on the bottom right-hand corner
11:56:08 13 is 597996, it appears to the book page is probably
11:56:12 14 P37 if that's easier for you?

11:56:15 15 A. (Witness perusing.) Uh-huh.

11:56:22 16 Q. On page P37 of Exhibit 262 there's an
11:56:25 17 abstract entitled "Miniaturization of Sequencing by
11:56:30 18 Hybridization (SBH): A Novel Method for Genome
11:56:34 19 Sequencing."

11:56:40 20 Do you see that?

11:56:40 21 A. Yes, I do.

11:56:40 22 Q. Is this an abstract of presentation that
11:56:41 23 Dr. Crkvenjakov and Drmanac made at the Santa Fe
11:56:46 24 meeting in November 1989?

11:56:47 25 A. Yes, it is.

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11:56:48 1 Q. In the posters that were presented at
11:56:52 2 the Santa Fe meeting were the abstracts included on
11:56:57 3 the poster?

11:56:59 4 A. Yes, definitely.

11:57:02 5 Q. Was the abstract on P37 of Exhibit 262
11:57:05 6 included on the poster presented by Dr. Crkvenjakov
11:57:09 7 and Drmanac in Santa Fe?

11:57:12 8 A. I'm sure it was; it was custom and
11:57:15 9 practice, though I can't claim an explicit
11:57:17 10 knowledge that it was there, but that was the
11:57:21 11 customary format.

11:57:43 12 Q. At the Santa Fe meeting in November
11:57:46 13 1989, did Drs. Crkvenjakov and Drmanac present on
11:57:52 14 the discrete particle miniaturization ideas that
11:57:57 15 they discussed with you at their lab in 1989 and
11:58:02 16 that we saw in your 1989 trip report?

11:58:05 17 A. This poster is a continuation of it.

11:58:08 18 Q. It's a continuation of that discrete
11:58:10 19 particle work?

11:58:12 20 A. Yes.

11:58:59 21 Q. Dr. Stodolsky, I've handed to you
11:59:04 22 Exhibits 263 which has Illumina production numbers
11:59:08 23 597916 through 597925.

24 (Exhibit 263 marked for identification.)

11:59:13 25 BY MR. PALS:

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11:59:13 1 Q. Dr. Stodolsky, is Exhibit 263 a list of
11:59:16 2 the attendees at the Santa Fe conference in
11:59:20 3 November 1989?
11:59:21 4 A. Yes; it is.
11:59:34 5 Q. On the page with production number
11:59:37 6 597921 of Exhibit 263 there is an entry identifying
11:59:43 7 you as an attendee. Do you see that?
11:59:46 8 A. (Witness perusing.) Yes.
11:59:53 9 Q. It identifies a DOE address for you.
11:59:55 10 This is the period when you were on loan from
11:59:59 11 Argonne to DOE?
12:00:02 12 A. Yes. That is correct.
12:00:14 13 Q. Prior to the Santa Fe conference in
12:00:17 14 November 1989 was there any requirement that people
12:00:20 15 execute a confidentiality agreement?
12:00:23 16 A. None.
12:00:24 17 Q. Was the information that was presented
12:00:27 18 at the Santa Fe meeting in November 1989 intended
12:00:29 19 to be information that was public and for use of
12:00:34 20 the people that attended and heard the information?
12:00:37 21 A. It was a completely open meeting, not
12:00:41 22 only to scientists of our program, but members of
12:00:44 23 the press; there was some commercial
12:00:45 24 representatives.
12:00:49 25 Q. So it was fully public?

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12:00:51 1 A. Fully public, for anyone who paid the
12:00:53 2 registration fee.

12:01:12 3 Q. Did you talk to Drs. Crkvenjakov or
12:01:19 4 Drmanac about their poster during the Santa Fe
12:01:23 5 conference in November 1989?

12:01:27 6 A. Undoubtedly, though I can't remember the
12:01:32 7 specific conversation, and more than likely I would
12:01:39 8 have gotten together with them and other people who
12:01:40 9 they might collaborate with over a lunch or a beer
12:01:43 10 or, you know, more than once during the
12:01:47 11 meeting...and similarly with all the other projects
12:01:52 12 I was responsible to. It was just my
12:01:54 13 responsibility to thus circulate.

12:01:58 14 Q. Did people take notes during the
12:02:02 15 presentations at the Santa Fe conference?

12:02:04 16 A. I'm sure they did.

12:02:05 17 Q. There is no prohibition against them
12:02:07 18 taking --

12:02:08 19 A. There was no prohibition. Some people
12:02:12 20 brought cameras and took pictures of posters they
12:02:17 21 were particularly interested in.

12:02:18 22 Q. And there was no prohibition against
12:02:20 23 that, either?

12:02:21 24 A. No.

12:02:22 25 Q. I'm sorry. I just introduced a double

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12:02:25 1 negative. Is it correct that there was no

12:02:28 2 prohibition against taking pictures of posters?

12:02:31 3 A. There was no prohibition against taking
12:02:34 4 pictures of posters.

12:03:19 5 Q. Dr. Stodolsky, I've handed you Illumina
12:03:24 6 deposition exhibit number 264 which that Illumina
12:03:28 7 production numbers 598104 through 598025.

8 (Exhibit 264 marked for identification.)

12:03:33 9 BY MR. PALS:

12:03:33 10 Q. Do you recognize Illumina deposition
12:03:36 11 Exhibit 264?

12:03:37 12 A. Yes. This was one of our periodic
12:03:40 13 publications in the course of the human genome
12:03:43 14 project about one per quarter.

12:03:45 15 Q. Was this publicly available?

12:03:47 16 A. Yes.

12:03:49 17 MR. PALS: As a matter recordkeeping
12:03:51 18 during production, this was when it was
12:03:55 19 produced by us, it was stamped as
12:03:58 20 "confidential," which is incorrect. We
12:04:03 21 withdraw any designation of confidentiality
12:04:06 22 as to this.

12:04:07 23 Q. Dr. Stodolsky, was Exhibit 264 in any
12:04:10 24 way confidential?

12:04:12 25 A. No.